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10/667,026	09/18/2003	Darrin W. Kabel	702.254	9123

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EXAMINER

STONE, JENNIFER A

ART UNIT	PAPER NUMBER
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2636

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/667,026

Applicant(s)

KABEL ET AL.

Examiner

Jennifer A. Stone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-22 is/are allowed.
- 6) ☒ Claim(s) 1-18 and 23-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5, 42, 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto et al. (US 20045/0006423).

For claim 1, Fujimoto discloses a method for marine navigation, comprising: receiving one or more preselected conditions from a user (parag 0115); the preselected conditions being selected from the group of land, water depth, rock(s), sandbars, shelves, tide condition, tidal data, wind conditions, weather conditions, ice, underwater obstacles, and type of water bottom, (parag 0018; 0047; 0115; Fig. 17a-c, items 301, 302); identifying a potential waypoint (paragraph 0071, 0072; Figure 4); and performing a marine route calculation algorithm to analyze a course between a first location and the potential waypoint in view of the preselected conditions (parag 0076-0078).

For claim 2, Fujimoto discloses performing the marine route calculation algorithm to include analyzing cartographic data that include preselected conditions between the first location and the potential waypoint with a preference for avoiding preselected conditions (parag 0023, parag 0106, lines 1-7; parag 0113; parag 0115).

For claim 3, the marine route calculation algorithm further includes re-routing the course to avoid the preselected conditions when the marine route calculation algorithm identifies one or more preselected conditions between the first location and the potential waypoint (parag 0023, 0132, 0133; Fig. 22a, 22b).

For claim 5, Fujimoto determines a first location on the course based on a signal from a GPS; and analyzing cartographic data for a predetermined area around the first location for preselected conditions (parag 0067, Ins 1-10; parag 0068, last 9 lines; parag 0071, 0072).

For claim 42, Fujimoto discloses a first location and a potential waypoint independent of a current location of a device implementing the method (parag 0139; 0140).

For claim 43, Fujimoto discloses at least a portion of the course is unrelated to a current heading of a device implementing the method (parag 0140, last 10 lines).

3. Claims 23-25, 27, 29, 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto et al. (US 20045/0006423).

For claim 23, Fujimoto discloses a computer readable medium having a set of computer readable instructions (parag 0067, Ins 1-10; parag 0068, Ins 1-8 and last 12 lines), the set of computer readable instructions comprising instructions for: receiving one or more preselected conditions from a user (parag 0115), the preselected conditions being selected from the group of land, water depth, rock(s), sandbars, shelves, tide condition, tidal data, wind conditions, weather conditions, ice, underwater obstacles, and type of water bottom, (parag 0018; 0047; 0115; Fig. 17a-c, items 301,

302); identifying a potential waypoint upon a first event (parag 0071, 0072; parag 0077, 0078); and performing a marine route calculation algorithm to analyze a course between a first location and the potential waypoint in view of preselected conditions (parag 008245).

For claim 24, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 2 as stated above.

For claim 25, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 27, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 29, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 17 as stated above.

For claim 33, the computer readable medium includes underwater obstacles as preselected conditions (parag 0108). A jetty and a pier are examples of both underwater and above water obstacles.

4. Claims 34-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto et al. (US 20045/0006423).

For claim 34, Fujimoto discloses an electronic marine navigation device, comprising: a processor; a user interface operatively coupled to the processor, wherein the user interface receives one or more preselected conditions from a user the preselected conditions being selected from the group of land, water depth, rock(s), sandbars, shelves, tide condition, tidal data, wind conditions, weather conditions, ice,

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underwater obstacles, and type of water bottom (parag 0018; 0047; 0115; Fig. 17a-c, items 301, 302) (parag 0067, Ins 6-12; Fig. 1, items 2, 3); a location input operatively coupled to the processor, wherein the location input receives a first location and a potential waypoint separate from the first location; and a memory operatively coupled to the processor and the location input (parag 0116), the memory having cartographic data including data related to the preselected conditions (parag 0115), wherein the processor operates on a marine route calculation algorithm to analyze a course between the first location and the potential waypoint in view of the preselected conditions of the cartographic data.

For claim 35, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 2 and 34 as stated above.

For claim 36, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 3 and 34 as stated above.

5. Claim 44 is rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto et al. (US 20045/0006423).

Fujimoto discloses a method for marine navigation, comprising: identifying a potential waypoint (paragraph 0066; 0072, lines 1,2); and performing a marine route calculation algorithm to analyze a course between a first location and the potential waypoint (parag 0068, Ins 5-8) in view of preselected conditions received from a user and selected from the group of land, water depth, rock(s), sandbars, shelves, tide condition, wind conditions, weather conditions, ice, underwater obstacles, and type of water bottom (parag 0047; parag 0115; Fig. 17a-c, items 301, 302).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423),

Fujimoto discloses a GPS system operatively coupled to the processor (Fig. 1, items 3, 6; parag 0066, Ins 1-3, 12-16), wherein the processor determines the first location on the course based on a signal received from the GPS (parag 0068, last 9 lines), and analyzes cartographic data for a predetermined area around the first location for preselected conditions (parag 0072; 0113). Even though Fujimoto does not specifically disclose a GPS receiver, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a GPS receiver to receive signals from a satellite in order to determine the ships position.

8. Claims 4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423), and further in view of Michaelson et al. (US 6,734,808).

For claim 4, Fujimoto discloses re-routing the course calculated, but does so by identifying user waypoints (parag 0140, Ins 1-5). Michaelson, on the other hand

discloses re-routing a course by identifying one or more non-user waypoints (determined by the system, not the user) between the first location and the potential waypoint (col 24, Ins 41-50 and 55-64). It would have been obvious to disclose non-user waypoints so that an operator of a ship relies on automatic navigation between a point of origin and a destination without constantly monitoring the ship's travel route.

For claim 6, Fujimoto does not disclose an alert signal; however, Michaelson discloses an alert signal is provided when the analyzed cartographic data for the predetermined area around the first location includes preselected conditions (col 2, Ins 11-14; col 6, Ins 13-17). It would have been obvious to provide an alert signal so that a ship's operator acknowledges an alert and verifies that the ship is maneuvered around a preselected condition to ensure the safety of the ships passengers.

For claim 7, Fujimoto does not disclose an alert signal; however, Michaelson discloses an alert signal is provided when the analyzed cartographic data for the predetermined data between the first location and the potential waypoint includes preselected conditions (col 6, Ins 13-26). It would have been obvious to provide an alert signal so that a ship's operator acknowledges an alert and verifies that the ship is maneuvered around a preselected condition to ensure the safety of the ships passengers.

For claim 8, the claim is interpreted and rejected for the same reasons as stated in the rejections of claim 6 and 7 as stated above. In addition, Michaelson discloses the alert signal includes emitting an audio alert (col 6, Ins 15-18; Fig. 2, item 28).



For claim 9, the claim is interpreted and rejected for the same reasons as stated in the rejections of claim 6-8 as stated above. Michaelson discloses providing the alert signal to include displaying a visual alert.

For claim 10, Fujimoto discloses receiving preselected conditions, but does not include weather conditions. However, Michaelson discloses this feature (col 26, lns 18-30). It would have been obvious to include weather conditions, so that an operator of a ship predicts changing weather patterns via a weather radar display.

9. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423), and further in view of Michaelson et al. (US 6,734,808).

For claim 11, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 1 and 6 as stated above.

For claim 12, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 13, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 4 as stated above.

For claim 14, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 7 as stated above.

For claim 15, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 16, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 17, Fujimoto discloses analyzing cartographic data further comprises acquiring cartographic data from a GPS (parag 0067, Ins 1-5).

For claim 18, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 10 as stated above. In addition, Fujimoto discloses receiving preselected conditions, but does not include water depth. However, Michaelson discloses this feature (col 2, Ins 15-19, 35-47; Fig. 9A-10B, col 13, Ins 56-67; col 14, Ins 1-10). It would have been obvious to include water depth, so that an operator of a ship maneuvers based on the depth of the water in order to avoid underwater obstacles.

10. Claims 26, 28, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423), and further in view of Michaelson et al. (US 6,734,808).

Claim 26 is interpreted and rejected for the same reasons as stated in the rejection of claim 4 as stated above.

Claim 28 is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

Claims 30-32 are interpreted and rejected for the same reasons as stated in the rejection of claims 7-9, respectively, and as stated above.

11. Claims 37, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423), and further in view of Michaelson et al. (US 6,734,808).

For claim 37, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 4 and 34 as stated above.

For claim 39, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 6 and 34 as stated above.

For claim 40, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 7 and 34 as stated above.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423), as applied to claim 34, and further in view of Michaelson et al. (US 6,734,808) and Horvath et al. (US 6,473,003).

Fujimoto discloses a processor to operate on the marine route calculation algorithm to analyze cartographic data (parag 0067, Ins 6-12; parag 0068, Ins 1-10); however, Fujimoto does not disclose an alert signal. Michaelson discloses an alert signal wherein a processor provides an alert signal when analyzed cartographic data includes preselected conditions (col 2, Ins 11-14; col 6, Ins 13-17). It would have been obvious to provide an alert signal so that a ship's operator acknowledges an alert and verifies that the ship is maneuvered around a preselected condition to ensure the safety of the ships passengers. However, neither Fujimoto nor Michaelson disclose a user defined graphical filter area. Horvath, on the other hand, does disclose a user defined graphical filter area (col 1, Ins 10-14; col 2, Ins 30, 31, 44-48) wherein a processor operates to analyze cartographic data and provides an alert signal when the analyzed cartographic data for the user defined graphical filter area includes preselected conditions (col 2, Ins 60-63; Fig. 4, 30i). Even though Horvath's primary application is aircraft navigation, it would have been obvious to apply a user defined graphical filter area to a marine

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navigation system so that a user has a certain degree of control over the display in order to customize it according to the user's preferences.

***Allowable Subject Matter***

13. Claims 19-22 are allowed.

***Response to Arguments***

14. Applicant's arguments filed December 20, 2005 have been fully considered but they are not persuasive.

The Applicant argues as follows:

a. Fujimoto neither discloses nor suggests any of these criteria (selected from the group of land, water depth, rock(s), sandbars, shelves, wind/weather conditions, weather conditions, ice, underwater obstacles, and type of water bottom) being used as preselected conditions.

b. Fujimoto only discloses an automatic maneuvering system that can avoid docks and the like, and then only when the user specifically defines the docks for the system. Fujimoto, Michaelson, and Horvath do not disclose receiving one or more preselected conditions from a user.

a. Fujimoto discloses that during marine navigation obstacles are avoided by either GPS data or manually set data (parag 0015). Further, Fujimoto describes the obstacles as a jetty and pier (Fig. 13-17, items 302 and 301, respectively). These obstacles are considered both underwater and above water obstacles. A jetty's support

system and a pier include support systems that are underwater. In addition, a jetty is a rock, land, or other manmade structure that extends into a body of water in order to influence the tide or current, or protect the frame of a pier. The area of a jetty that is either above or underwater changes depending on tidal changes. Therefore, Fujimoto meets the criteria being used as preselected conditions.

b. Fujimoto discloses obstacles such as piers and jetty's, not docks. In addition, a user either specifically defines the obstacle received as a preselected condition or the system automatically recognizes the preset condition based on GPS data (parag 0115). Either of the above methods of defining an obstacle constitute the system to recognize and receive one or more preselected conditions from a user. Thus, Fujimoto meets all claim limitations.

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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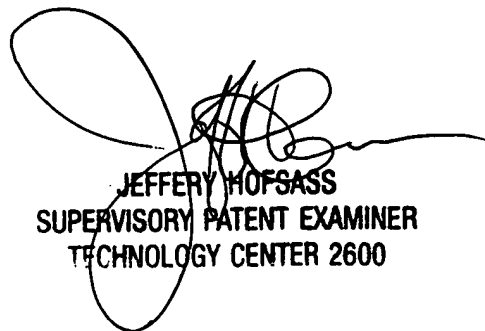
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Stone whose telephone number is (571) 272.2976. The examiner can normally be reached on M-F from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass, can be reached at (571) 272.2981. The fax phone number for the organization where this application or proceeding is assigned is (571) 273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Stone  
December 27, 2005



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